

nance imaging (MRI), a computed tomography (CT), a scanner, an ultrasonic device, or the like), a navigation device, a global navigation satellite system (GNSS), an event data recorder (EDR), a flight data recorder (FDR), a vehicle infotainment device, electronic equipment for vessels (e.g., a navigation system, a gyrocompass, or the like), avionics, a security device, a head unit for a vehicle, an industrial or home robot, an automated teller machine (ATM), a point of sales (POS) device of a store, or an Internet of things (IoT) device (e.g., a light bulb, various sensors, an electric or gas meter, a sprinkler, a fire alarm, a thermostat, a streetlamp, a toaster, exercise equipment, a hot water tank, a heater, a boiler, or the like).

**[0042]** According to various embodiments of the present disclosure, an electronic device may be embodied as at least one of a part of furniture or a building/structure, an electronic board, an electronic signature receiving device, a projector, or a measuring instrument (e.g., a water meter, an electricity meter, a gas meter, a wave meter, or the like). An electronic device may be one or more combinations of the above-mentioned devices. An electronic device, according to some embodiments of the present disclosure, may be a flexible device. An electronic device, according to an embodiment of the present disclosure, is not limited to the above-described devices, and may include new electronic devices with the development of new technology.

**[0043]** Hereinafter, an electronic device, according to various embodiments of the present disclosure, will be described in more detail with reference to the accompanying drawings. The term “user”, as used herein, may refer to a person who uses an electronic device or may refer to a device (e.g., an artificial intelligence electronic device) that uses an electronic device.

**[0044]** FIG. 1 is a block diagram illustrating a configuration of an electronic device associated with face detection, according to an embodiment of the present disclosure. An electronic device 100 may be a photographing device, which may capture or photograph an object. For example, the electronic device 100 may be a portable electronic device, such as a digital camera, a digital camcorder, or a smartphone, and the like. The electronic device 100 may obtain a still image or a video by photographing. According to various embodiments, the electronic device 100 may provide functions such as, for example, an auto-focus function, an auto-exposure function, and a custom white balance function. However, the functions of the electronic device 100 are not limited thereto. For example, the electronic device 100 may provide a variety of functions, such as a zoom-in function, a zoom-out function, a photographing function, a continuous photographing function, a timer photographing function, a flash on/off function, or a filter function, associated with photographing an image. Therefore, a user of the electronic device 100 may obtain a photographed (or captured) image by setting an image photographing condition using functions provided from the electronic device 100.

**[0045]** According to various embodiments, the electronic device 100 may provide an image, such as a preview image or a live-view image, for showing an image to be photographed in advance through a screen (e.g., a display 170) while a photographing function is performed. For example, if an image photographing condition is set, the electronic device 100 may provide a preview or live-view image to which the image photographing condition is applied.

**[0046]** Referring to FIG. 1, the electronic device 100 includes a photographing module 110, a memory 130, a processor 150, and the display 170. The photographing module 110 includes, for example, a lens 111 for receiving image light of an object and imaging the received image light as an image, an aperture 113 for adjusting an amount of light passing through the lens 111, a shutter 115 for performing a function of opening and closing the aperture 113 such that an image sensor 117 is exposed for a time by light passing through the lens 111, the image sensor 117 for receiving the image imaged by the lens 111 as an optical signal, and an internal memory 119.

**[0047]** The lens 111 may include, for example, a plurality of optical lenses. The lens 111 may receive light input after being reflected from an object such that an image is focused on a photosensitive surface of the image sensor 117. According to an embodiment, the lens 111 may perform a zoom function based on a signal of the processor 150 and may automatically adjust a focus.

**[0048]** According to various embodiments, the lens 111 may be detachably mounted on the electronic device 100. For example, if the lens 111 is mounted on the electronic device 100, it may support a photographing function. If the electronic device 100 does not perform the photographing function, the lens 111 may be detached from the electronic device 100 and may be kept separate. The lens 111 may have various forms. The user may selectively mount the lens 111 on the electronic device 100 based on a photographing mode or a photographing purpose. In various embodiments, the electronic device 100 may further include a lens cover configured to cover the lens 111. For example, the lens cover may allow one surface (e.g., a front surface) of the lens 111 to be opened and closed. Although the lens 111 is mounted on the electronic device 100, the lens cover may block light and maintain a state where the electronic device 100 may not photograph an image. According to various embodiments, the electronic device 100 may further include a separate sensor (e.g., an illumination sensor and the like) and may determine whether the lens cover is combined or whether the lens cover is opened or closed, through the separate sensor. Information indicating whether the lens cover is combined or whether the lens cover is opened or closed may be provided to the processor 150. Therefore, the processor 150 may determine a photographing enable state.

**[0049]** The aperture 113 may adjust an amount of light passing through the lens 111. According to various embodiments, the aperture 113 may be provided in the form of a disc and may be provided such that its region is opened and closed based on an aperture value. Since a path through which light enters varies in size based on a degree in which the region is opened and closed, the aperture 113 may adjust a degree, in which light passing through the lens 111 is exposed to the image sensor 117, in a different way. For example, when an aperture value is higher, a degree in which the region is closed may be more increased. Therefore, an amount of entering light may be more reduced. When an aperture value is lower, a degree in which the region is opened may be more increased and an amount of entering light may be more increased.

**[0050]** The shutter 115 may perform a function of opening and closing the aperture 113. For example, the electronic device 100 may expose light to the image sensor 117 by opening and closing the shutter 115. According to various embodiments, the shutter 115 may adjust an amount of light